

For: MAGNETO-CYMATIC THERAPEUTIC OSCILLATING WAND

Inventor: Vincent ARDIZZONE  
(Port Jefferson, N.Y.)

Background of the Invention

1. Field

The present invention relates to a therapeutic device that is intended to simultaneously apply magnetic therapy with cymatic therapy to an anatomical area to be treated.

2. State of the Art

The therapeutic use of devices delivering cymatic vibrations to treat certain ailments and debilitating conditions is known. Cymatic therapy is based on the principal that every cell in the body is enveloped by an electromagnetic field which resonates at its own particular sound frequency. Around 850 cymatic frequencies have been discovered over the years. When the body is well these frequencies are steady and constant, but any dysfunction or disease upsets the harmony of the body and the effected areas then generate off-resonance frequencies. Cymatic therapy aims to generate a frequency identical to that of healthy cells. The aim is to support what the cells are trying to do naturally, thereby aiding the healing process and restoring the body to good health and harmony.

The therapeutic use of magnetic fields in treating various conditions is also well known. The beneficial effects of applying a magnetic field to an area of human and animal anatomy such as the back, legs, arms and the like, are widely known and well documented. Magnetic fields are commonly used for therapeutic purposes such as reduction of inflammation in tissues and pain relief. Although it is not entirely clear how magnetic therapy works, it has been found to increase blood flow and therefore oxygen

carrying capacity, to change the migration of calcium ions to or from the bone, to alter the pH balance of various body fluids, to alter hormone production from endocrine glands and to alter the enzymatic activity and other biochemical processes of the human body.

Many therapeutic devices are available which apply magnetic therapy to an anatomical area such as the muscles of the lower back to enhance circulation and relax such muscle. Indeed, many therapeutic devices are known which combine magnetic therapy with vibratory massage, heat, infrared, or sound, or a combination of same. Ardizzone in U.S. Patent No. 6,383,129 discloses a magnetotherapeutic device which combines magnetotherapy in conjunction with infrared therapy. Souder in U.S. Patent No. 6,231,497 discloses a magnetic therapy device which combines a dynamic magnetic field in conjunction with vibratory massage. Eschenbach in U.S. Patent No. 6,182,313 discloses a magnetic therapy head cradle apparatus which combines a sound system in the head cradle with the magnetic field. Franco-Vila in U.S. Patent No. 4,177,796 discloses a magnetic thermal vibrational device which simultaneously applies electromagnetic alternating directional energy, thermal, and vibrational energy to various areas of the body to reduce or eliminate the pains and symptoms of arthritis.

Although these various prior art devices apply magnetic therapy in combinations with vibration, heat and sound, none of the prior art devices apply a magnetic field in conjunction with cymatic vibration. Although both magnetic therapy and cymatic therapy have each been utilized to treat an effected area, the combination of the two therapies delivered by the single therapeutic device of the invention provides additional beneficial effects to the user as the treated area receives both cymatic vibrational therapy to re-establish cellular resonance to treat a specific condition and magnetic stimulation to

enhance blood flow. Cymatic frequencies are delivered both by mechanical vibration and by the vibrating magnetic field by inductively linking with the cell's own electromagnetic field. This novel combination of cymatic vibrations with a magnetic field provides a superior mode of therapy that can conveniently be applied over most areas of the entire body.

#### Objects and Summary of the Invention

It is therefore, an object of the present invention to provide an improved device for therapeutic treatment of tissue by combining magnetic therapy using a strong magnet and cymatic therapy by providing a transducer which generates vibrations at a plurality of frequencies, simultaneously or alternatively, in accordance with the requirements of the operator.

It is yet another object of the invention to combine magnetic therapy and cymatic therapy in an integral and consolidated portable device that is convenient to use and does not require a direct mechanical linkage to the body.

The present invention relates to a therapeutic device and process for the application of cymatic and magnetic therapy simultaneously through the use of an undulating wand applied directly to or close to the body.

Broadly, one aspect of the invention relates to an apparatus for therapeutic treatment of a person's body comprising a wand-like applicator with a flexible application surface, at least one rare earth permanent magnet coupled to a transducer that converts cymatic sound frequencies to mechanical vibrations, and a Central Processing Unit ("CPU") that

produces electrical signals at selected cymatic sound frequencies that is electrically connected to the transducer.

The invention also provides an apparatus for treating various injuries and/or disease conditions, comprising a wand-like device capable of generating cymatic vibrations simultaneously with a strong magnetic field and locatable in direct contact with or above the skin of an affected body part.

Advantageously, the present invention provides a portable therapeutic device, having a handheld wand-like applicator that can be applied to any part of the body and provides vibration corresponding to an adjustable range of cymatic frequencies in combination with magnetic therapy.

#### Brief Description of the Drawings

Further features, benefits, and advantages of the present invention will be apparent from a review of the following detailed description and accompanying drawings, in which like reference characters refer to like elements, and in which:

Fig. 1 is a perspective view of an apparatus according to a preferred embodiment of the present invention;

Fig. 2 is a section view taken along lines A-A of Fig. 1;

Fig. 3 is a side view of the wand-like applicator of Fig. 1. seated in a wand housing; and

Fig. 4 is a top view of Fig. 3.

#### Detailed Description of the Invention

The detailed description set forth below in connection with the appended drawings is intended as a description of presently preferred embodiments of the invention and is not intended to represent the only forms in which the present invention may be constructed and/or utilized. The description sets forth the functions and the sequence of steps for constructing and operating the invention in connection with the embodiments which are described for purposes of illustration and not of limitation. However, it is to be understood that the same or equivalent functions and sequences may be accomplished by different embodiments that are also intended to be encompassed within the spirit and scope of the invention, and that particular values and measures may be varied without departing there from.

The Figures show different views of the magneto-cymatic therapeutic device of the present invention. The present invention is applicable to a wide variety of disease conditions such as musculoskeletal injuries, rheumatoid joint conditions, lower back pain, and carpal tunnel syndrome.

The present invention provides for treating disease conditions by positioning the therapeutic apparatus of the invention directly in contact with the skin or directly above the skin over an affected body part. In a preferred embodiment, with reference to Figs 1 and 2, an application surface (3) is mounted on a wand-like applicator (4) which fits into a wand housing (9) and is provided in different shapes to allow maximum contact between the application surface (3) and the contours of the body part to be treated (not shown). Different shapes and sizes of the wand-like applicator (4) are possible to better accommodate different parts of the body, e.g., a smaller wand and applicator head for treating the smaller muscles of the face. The wand housing (9) functions to provide a

convenient mechanism to hold the applicator and for aesthetic purposes. The applicator-wand housing (9) and applicator-wand (4) are constructed of non-magnetic material. In the preferred embodiment a magnetic field is generated by at least one powerful permanent magnet (7) situated close to the surface of and centered on the application surface (3) of the applicator-wand (4). The magnetic field provided has a magnetic strength within the range of 300 to 3000 gauss, preferably 3000 gauss, as measured at the magnet surface by a Gaussmeter. The magnetic field is generated by a strong permanent magnet selected from such materials as neodymium (Nd), samarian cobalt, ferrite, or alnico. Neodymium is preferred as it provides the most powerful magnetic material. An electric coil may be used instead of a permanent magnet to produce an oscillating electromagnetic field; further providing the ability to produce a magnetic field of variable strength. However, the level of current required to produce a magnetic field of comparable strength to a high power permanent magnet is not as practical because the size of wire and number of turns required would adversely effect the operation of the transducer mechanism. In the preferred embodiment the magnetic field will concurrently oscillate at the prescribed cymatic frequencies.

The cymatic frequencies are generated from electrical signals produced at audio frequencies by a Central Processing Unit (2) and transmitted to a transducer (6) contained within the applicator-wand (4). Transducer (6) converts the electrical signals to mechanical vibrations which cause the application surface (3) to oscillate according to selectable sound wave (cymatic) frequencies, and thereby provide cymatic treatment when the applicator-wand is applied directly in contact with specific areas of the body. The cymatic frequencies are preferably preset. Another mode of treatment involves applying the applicator-wand (4) above the body part to be treated but without directly

contacting the skin. The magnetic field emanating from the applicator-wand and vibrating at the frequencies generated by the transducer can penetrate the tissue and deliver cymatic therapy in conjunction with magnetic therapy by induction with the electromagnetic frequency of the tissue being treated without the need for the apparatus to contact the body. The strength of the magneto-cymatic therapy so delivered may be varied by varying the distance that the applicator-wand is held above the skin.

The simultaneous application of the strong magnetic field with the cymatic vibrations will produce additional stimulation to the underlying tissue that the mechanical cymatic oscillations of the applicator-wand alone or the magnetic field alone cannot produce.

The application surface (3) is smooth and flexible.

The magnet (7) will be coupled securely to the transducer (6) as close to the application surface (3) as practical.

The device may be turned on or off by a switch (5) on the wand-like applicator (4).

The wand-like applicator may be flexibly connected to the Central Processing Unit (2) by means of an electric cable (1).

In order to enhance such magneto therapeutic properties, the applicator-wand may be moved in a variety of patterns over the affected body part.

By providing a twofold therapeutic approach whereby both magnetic and cymatic therapy are simultaneously provided, the present invention provides a means by which better tissue therapy may be provided by the application of both methods or treatment regimes.

There may be some synergistic effects provided in the simultaneous application of both magnetic therapy and cymatic therapy.